

Product Data Sheet  
Edition 07.2008  
Identification No. CA - 10



## KEMFLOW SUPER F20

High range water reducing concrete admixture

### Description

**KEMFLOW SUPER F20** is a super plasticizer for high quality concrete in hot climates, for allowing increased early strength. The basic components are synthetic polymers which allow mixing water to be reduced. Complies with A.S.T.M. C494 type F.

### Where to use

- **KEMFLOW SUPER F20** is used for flow concrete.
- Where high early strength is required.
- For pre-stressed concrete.
- Precast concrete elements.

### Advantages

- KEMFLOW SUPER F20** provides the following:-
- Improvement in workability without increase in water.
  - Accelerated strength after normal setting.
  - For high quality finishing.
  - Chloride free.
  - Compatible with all types of Portland cement including S.R.C.
  - Up to 20% water reduction.

### Technical Data

Colour	Brown
Specific Gravity	1.2 at 20°C
Calcium Chloride Content	Nil to BS 5075

**Cohesion / Segregation:** Improved dispersion of the cement particles will increase cohesion at both the flowing and plastic consistency. The occurrence of bleeding and sand runs is substantially reduced. This improving the surface finish achieved.

**Durability:** When KEMFLOW SUPER.F20 is used for water reduction the increase in density and reduction of permeability, improves durability and reduces porosity.

**Workability:** Without reducing the free water content KEMFLOW SUPER F20 will produce free flowing concrete giving a flow table value of 51-62 cm (BS 1881). Some minor mix amendments may be required to produce a flowing mix without segregation.

### How to use

#### Dosage:

The optimum dosage for KEMFLOW SUPER.F20 should be determined by site trials with the particular concrete mix under prevailing ambient conditions. Site trails should always be compared with and without KEMFLOW SUPER.F20 to quantify the true value of increase in workability and / or strength gain. As a guide, the dosage will fall into one of two ranges dependent on use:  
0.8 – 2 % from weight of cement for cubic meter

#### Overdosing:

An over dose of double the recommended amount of KEMFLOW SUPER.F20 will result in very high workability and some retardation will occur. The ultimate compressive strength of the concrete will not be impaired.

#### Dispensing:

The correct quantity of KEMFLOW SUPER.F20 should be measured by means of an appropriate dispenser. The measured quantity of admixture should be added directly to the concrete with the mixing water where possible.

The plasticizing effect or water reduction is higher. If the admixture is added to the concrete after 60-75% of the mixing water has been added. The addition of KEMFLOW SUPER F20 to the dry aggregate of cement is not recommended.

#### Mixing:

When flowing concrete is to be used, the dosing should be based on high cohesion pump mix technology. Where maximum economy is required via cement saving and free water content reduction the fines content should always be as (low) as possible to allow the remaining free water to act more efficiently.

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**Curing:**

As with all structural concrete, normal curing methods apply. Water spray, wet hessian or one of the KEMCURE spray applied surface contact curing membranes should be used in all cases.

**Cleaning:** Spillage of KEMFLOW SUPER F20 can be removed with water.

**Packaging:**

KEMFLOW SUPER.F20 is supplied in 25 and 220 kg drums.

**Storage:**

KEMFLOW SUPER.F20 has a maximum shelf life of 12 months at recommended conditions.

**Health and Safety**

- KEMFLOW SUPER.F20 is non-toxic. Any splashes to the skin should be washed immediately with water.
- Splashes to the eyes should be washed immediately with water and medical advice should be sought.

**Additional Information**

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range.

For our customer's satisfaction, PROKEM extends technical services to include after sales support to assist users in a proper handling of our products.